

CLAIMS:

1. A data processing device comprising
a memory having locations, each capable of storing a WOM codeword from a WOM code;
a memory selector for selecting a currently selected location of a logical series of the
locations;
- 5 a data encoder that encodes a received data value in a new codeword from the WOM code, as
a function of the received data value and a previous codeword stored in the currently selected
location, the data encoder causing the currently selected location to be changed to a next one
in the logical series when the WOM code is exhausted, the data encoder storing the new
codeword in the currently selected location;
- 10 - a reset circuit for resetting a content of the locations in the logical series, the
reset circuit being triggered when the WOM code is exhausted for all the locations of the
logical series.
2. A data processing device according to Claim 1, wherein the memory selector
15 is arranged to determine the currently selected location from a content of the locations, so
that the currently selected location has an immediate predecessor location, if any, that
contains a codeword indicating that the location is full and an immediate successor location,
if any, that contains an initial codeword value produced by resetting.
- 20 3. A data processing device according to Claim 1, comprising
- an input for receiving a dataword;
- an error correcting encoder, arranged to form N data values, each data value at
least representing a respective part of the dataword encoded in an error correcting code;
- the memory selector being arranged to select N currently selected locations,
25 each of a respective logic series of the locations;
- the data encoder encoding the data values in N respective new codewords
from the WOM code, each as a function of a respective one of the data values and a previous
codeword stored in the currently selected location of a respective one of the logic series, the
data encoder causing the currently selected location or locations to be changed for those of

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the logic series in which the WOM code is exhausted, the encoder storing each new codeword in the currently selected location of a respective one of the series;

- the reset circuit being triggered for those of the logic series where WOM code is exhausted for all locations in of the logic series.

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4. A data processing device according to Claim 1, said series of locations being one of a plurality of logical series of locations comprised in the memory, the data processing device comprising

- an address input for receiving an address value corresponding to the data;

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- a series selector for selecting, under control of the address value, the series of locations operated upon by the memory selector, the data encoder and the reset circuit.

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